



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0195; Directorate Identifier 2012-NE-08-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Honeywell International, Inc. Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Honeywell International, Inc. ALF502L-2C; ALF502R-3; ALF502R-3A; ALF502R-5; LF507-1F; and LF507-1H turbofan engines. This proposed AD was prompted by two reports of engines experiencing uncontained release of low-pressure (LP) turbine blades. This proposed AD would require operational checks of the engine overspeed trip system. We are proposing this AD to prevent LP turbine overspeed leading to uncontained release of the LP turbine blades and damage to the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Honeywell International, Inc., P.O. Box 52181, Phoenix, AZ 85072-2181, phone: 800-601-3099; website: <http://portal.honeywell.com/wps/portal/aero>. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Robert Baitoo, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Blvd., Lakewood, CA 90712 ; phone: 562-627-5245; fax: 562-627-5210; e-mail: [robert.baitoo@faa.gov](mailto:robert.baitoo@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0195; Directorate Identifier 2012-NE-08-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all

comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received two reports of engines experiencing uncontained release of LP turbine blades. Investigation revealed that the overspeed trip system on both of these engines had a preexisting (latent) failure when the fan decoupled from the LP turbine, due to a certain part failing in the reduction gearbox. This condition, if not corrected, could result in LP turbine overspeed leading to uncontained release of the LP turbine blades and damage to the airplane.

### **Relevant Service Information**

We reviewed Honeywell International, Inc. ALF502L Engine Maintenance Manual Section 72-00-00, Inspection/Check-10, dated October 31, 2000; ALF502R Engine Manual Section 72-00-00, Inspection/Check-09, dated July 31, 2000; LF507-1F Engine Manual Section 72-00-00, Inspection/Check-08, Temporary Revision 72-146, dated November 3, 2006; and LF507-1H Engine Manual Section 72-00-00, Inspection/Check-08, dated September 30, 1999. The service information describes procedures for operational checks of the overspeed trip system.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would require initial and repetitive operational checks of the overspeed trip system.

### **Costs of Compliance**

We estimate that this proposed AD would affect 188 Honeywell International, Inc. ALF502L-2C; ALF502R-3; ALF502R-3A; ALF502R-5; LF507-1F; and LF507-1H turbofan engines, installed on airplanes of U.S. registry. We also estimate that it would take about one work-hour to perform an operational check of the overspeed trip system on each engine. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the total cost of this proposed AD for one operational check of the overspeed trip system to U.S. operators, to be \$15,980.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct

effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Honeywell International, Inc.:** Docket No. FAA-2012-0195; Directorate Identifier 2012-NE-08-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER.]

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Honeywell International, Inc. ALF502L-2C; ALF502R-3; ALF502R-3A; ALF502R-5; LF507-1F; and LF507-1H turbofan engines.

**(d) Unsafe Condition**

This AD was prompted by two reports of engines experiencing uncontained release of low-pressure (LP) turbine blades. We are issuing this AD to prevent LP turbine overspeed leading to uncontained release of the LP turbine blades and damage to the airplane.

**(e) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(f) Initial Check of the Overspeed Trip System**

Within 30 operating hours after the effective date of this AD, perform an initial check of the overspeed trip system, in accordance with the applicable engine manual section listed in Table 1 of this AD.

**Table 1 – Applicable Engine Manual Sections**

For ALF502L-2C Engines:	Use Honeywell ALF502L Engine Maintenance Manual Section 72-00-00, Inspection/Check-10, 1.B.(1) through 1.B.(3), dated October 31, 2000.
For ALF502R-3; ALF502R-3A; and ALF502R-5 Engines:	Use Honeywell ALF502R Engine Manual Section 72-00-00, Inspection/Check-09, 1.C.(1), dated July 31, 2000.
For LF507-1F Engines:	Use Honeywell LF507-1F Engine Manual Section 72-00-00, Inspection/Check-08, Temporary Revision 72-146 1.B.(1) through B.(8), dated November 3, 2006.
For LF507-1H Engines:	Use Honeywell LF507-1H Engine Manual Section 72-00-00, Inspection/Check-08,

**(g) Repetitive Checks of the Overspeed Trip System**

(1) For ALF502L-2C engines, perform repetitive checks of the overspeed trip system at 100-hour intervals of operation, in accordance with the applicable engine manual section listed in Table 1 of this AD.

(2) For ALF502R-3; ALF502R-3A; ALF502R-5; LF507-1F; and LF507-1H engines, perform repetitive checks of the overspeed trip system once every flight day, in accordance with the applicable engine manual section listed in Table 1 of this AD.

**(h) Definition**

For the purpose of this AD, a flight day is a 24-hour period during which at least one flight is indicated.

**(i) Signing Off of Daily Repetitive Checks**

Upon starting the daily repetitive checks, only one sign-off is required attesting to the daily check implementation.

**(j) Alternative Methods of Compliance (AMOCs)**

The Manager, Los Angeles Aircraft Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(k) Related Information**

(1) For more information about this AD, contact Robert Baitoo, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Blvd., Lakewood, CA 90712 ; phone: 562-627-5245; fax: 562-627-5210; e-mail: robert.baitoo@faa.gov.

(2) For service information identified in this AD, contact Honeywell International, Inc., P.O. Box 52181, Phoenix, AZ 85072-2181, phone: 800-601-3099; website: <http://portal.honeywell.com/wps/portal/aero>. You may review copies of the referenced

service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on March 1, 2012.

Peter A. White,  
Manager Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-5790 Filed 03/08/2012 at 8:45 am; Publication Date: 03/09/2012]